

AMENDMENT

In the Claims:

The following listing reflects amendments to the claims and replaces all prior versions and listings of claims in this application.

1. (Currently amended) An isolated, immunogenic polypeptide comprising one or more of: (a) an amino acid sequence selected from the group consisting of SEQ ID NOS: 51, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 54; (b) an amino acid sequence having at least 70% identity to a sequence as defined in (a); and/or (c) an amino acid sequence comprising a fragment of at least 8 16 consecutive amino acids of a sequence as defined in (a).
2. (Original) The polypeptide of claim 1, wherein the fragment of (c) does not include one or more of four domains of the sequence of (a).
3. (Original) The polypeptide of claim 1, wherein the fragment of (c) includes at least one complete domain of the sequence of (a).
4. (Previously presented) The polypeptide of claim 1, in oligomeric form.
5. (Currently amended) An isolated, immunogenic polypeptide of the formula NH₂ A-{X-L-}_x-B-COOH, wherein: X comprises an amino acid sequence: (a) having at least 70% identity to one or more of SEQ ID NOS: 1-18, 51 or 54; and/or (b) which is a fragment of at least 8 16 consecutive amino acids of one or more of SEQ ID NOS: 1-18, 51 or 54; L is an optional linker amino acid sequence; A is an optional N terminal amino acid sequence; B is an optional C terminal amino acid sequence; and x is 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 or 20.

6. (Currently amended) An isolated, immunogenic polypeptide comprising the amino acid sequence -A-W₁-W₂-W₃-W₄-B-, wherein:

A is an optional N-terminus sequence;

B is an optional C- terminus sequence;

W₁ is an optional amino acid sequence: (a) having at least 70% identity to the leader peptide of one or more of SEQ ID NOS: 1- 18 or 51; and/or (b) which is a fragment of at least 8 16 consecutive amino acids of the leader peptide of one or more of SEQ ID NOS: 1-18 or 51; W₂ is an optional amino acid sequence: (a) having at least 70% identity to the globular head of one or more of SEQ ID NOS: 1-18 or 51; and/or (b) which is a fragment of at least 8 16 consecutive amino acids of the leader peptide of one or more of SEQ ID NOS: 1-18 or 51; W₃ is an optional amino acid sequence: (a) having at least 70% identity to the coiled-coil domain of one or more of SEQ ID NOS: 1-18 or 51; and/or (b) which is a fragment of at least 8 16 consecutive amino acids of the leader peptide of one or more of SEQ ID NOS: 1-18 or 51; W₄ is an optional amino acid sequence: (a) having at least 70% identity to the transmembrane anchor region of one or more of SEQ ID NOS: 1-18 or 51; and/or (b) which is a fragment of at least 8 16 consecutive amino acids of the leader peptide of one or more of SEQ ID NOS: 1-18 or 51;
provided that at least one of W₁, W₂, W₃ or W₄ is present.

7-9. (Cancelled)

10. (Previously presented) An immunogenic composition comprising the polypeptide of claim 1.

11. (Cancelled)

12. (Cancelled)

13. (Withdrawn) A method for raising an immune response in a mammal comprising the step of administering an effective amount of the composition of claim 10 to said mammal.

14-17. (Canceled)

18. (Previously presented) An immunogenic composition comprising the polypeptide of claim 5.

19. (Previously presented) An immunogenic composition comprising the polypeptide of claim 6.

20. (Canceled)

21. (Withdrawn) A method for raising an immune response in a mammal comprising the step of administering an effective amount of the composition of claim 18 to said mammal.

22. (Withdrawn) A method for raising an immune response in a mammal comprising the step of administering an effective amount of the composition of claim 19 to said mammal.

23. (Canceled)

24. (New) The isolated immunogenic polypeptide of claim 1, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO: 51.

25. (New) The isolated, immunogenic polypeptide of claim 5, wherein X comprises the amino acid sequence of SEQ ID NO: 51.

26. (New) The isolated, immunogenic polypeptide of claim 6, wherein W₁ is an optional amino acid sequence of the leader peptide of SEQ ID NO: 51; W₂ is an optional amino acid sequence of a globular head of SEQ ID NO: 51; W₃ is an optional amino acid sequence of a coiled-coil domain of SEQ ID NO: 51; W₄ is an optional amino acid sequence of a transmembrane anchor region of SEQ ID NO: 51.
27. (New) An immunogenic composition comprising the polypeptide of claim 24.
28. (New) An immunogenic composition comprising the polypeptide of claim 25.
29. (New) An immunogenic composition comprising the polypeptide of claim 26.
30. (New) A method for raising an immune response in a mammal comprising the step of administering an effective amount of the composition of claim 27 to said mammal.
31. (New) A method for raising an immune response in a mammal comprising the step of administering an effective amount of the composition of claim 28 to said mammal.
32. (New) A method for raising an immune response in a mammal comprising the step of administering an effective amount of the composition of claim 29 to said mammal.